

Appl. No. 10/812,606
Amdt. dated September 27, 2005
Reply to Office Action dated June 27, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently amended) A method of cleaning an epitaxial deposition apparatus comprising:
increasing the surface temperature of a bell jar in said epitaxial deposition apparatus to a first predetermined temperature range;
monitoring measuring the air flow temperature within an exhaust plenum of said epitaxial deposition apparatus wherein said air flow temperature correlates to said first predetermined temperature range and wherein said air flow past said bell jar is controlled by said monitored air flow temperature within said exhaust plenum;
introducing a reactive gas capable of reacting at said first predetermined temperature range with material deposited on the inside surface of said bell jar and forming gaseous by-products; and
maintaining the temperature of said bell jar surface at said first predetermined temperature range for a time sufficient to allow said material deposited on said inside surface of said bell jar to be removed.
2. (Original) The method as claimed in Claim 1 wherein said method further includes removing said gaseous by-products from said bell jar.

Appl. No. 10/812,606
Amdt. dated September 27, 2005
Reply to Office Action dated June 27, 2005

3. (Original) The method as claimed in Claim 2 wherein said removing step is performed by purging said bell jar with a purging gas.
4. (Original) The method as claimed in Claim 1 wherein said method further includes measuring the transparency of said bell jar wall.
5. (Original) The method as claimed in Claim 1 wherein said method further includes purging said reactive gas from said bell jar.
6. (Original) The method as claimed in Claim 1 wherein said method further includes decreasing the temperature of said bell jar surface to a second predetermined temperature after removal of said deposited material from the inside surface of said bell jar.
7. (Currently amended) The method as claimed in Claim 1 wherein said step of increasing said temperature further includes reducing the speed of an air-circulating blower of said epitaxial deposition apparatus wherein the air flow caused by said blower flows past said bell jar and wherein said blower speed is controlled by said air flow temperature within said exhaust plenum used to control the temperature of said bell jar surface.

Appl. No. 10/812,606
Amdt. dated September 27, 2005
Reply to Office Action dated June 27, 2005

8. (Original) The method as claimed in Claim 1 wherein said step of maintaining the temperature of said bell jar surface at said first predetermined temperature range further includes measuring the surface temperature of said bell jar surface.